

### Claims

1. A composition suitable for the treatment or prophylaxis of COPD and other acute or chronic diseases in a mammal, especially a human being, comprising at least one  
5 of glutamate, other than mono sodium glutamate, and a precursor of glutamate selected from the group consisting of leucine, valine, isoleucine, and a keto acid thereof, in a daily dose for said mammal of at least 6 grams of the total of said glutamate and precursor forms thereof.

10 2. A composition as claimed in claim 1 comprising at least one of glutamate, other than mono sodium glutamate, and a precursor of glutamate selected from the group consisting of leucine, valine, isoleucine, and a keto acid thereof, in a daily dose for said mammal in a range of between 9 and 20 grams of the total of said glutamate and precursor forms thereof.

15 3. A composition as claimed in claim 1 or claim 2 which is a dietary food supplement where the amount of said glutamate or said precursor form thereof is subdivided in dosages of up to 3 grams, for regular administration to achieve continuously increasing glutamate level.

20 4. A composition as claimed in claim 1 of claim 2 which is a pharmaceutical composition where the amount of said glutamate or said precursor form thereof is subdivided in unit dosages of up to 3 grams, for regular administration to achieve continuously increasing glutamate level, the pharmaceutical composition further comprising  
25 a pharmaceutical acceptable carrier.

5. Use of at least one of glutamate, other than mono sodium glutamate, and a precursor of glutamate selected from the group consisting of leucine, valine, isoleucine, and a keto acid thereof, in the preparation of a medicament for the treatment or prophylaxis of  
30 COPD and other acute or chronic diseases in a mammal, especially a human being, wherein the medicament is formulated in a unit dose form to achieve a daily dose of at least 6 grams of the active ingredient of the medicament.

6. Use as claimed in claim 5, wherein the medicament is formulated in a unit  
35 dose form to achieve a daily dose in a range of between 9 and 20 grams of the active ingredient of the medicament.

7. A pharmaceutical composition as claimed in claim 4, or the use as claimed in claim 5 or claim 6, which is formulated for oral or parenteral administration.

8. A pharmaceutical composition as claimed in claim 4, or the use as claimed in  
5 claim 5 or claim 6, which is formulated to achieve a continuously increasing glutamate level.

9. Use as claimed in any one claims 5 to 8, wherein the medicament additionally contains one or more substances selected from the group of stimulants, hormones, analogues of such hormones, phyto-hormones, analogues of such phyto-hormones, and  
10 anti-oxidants.

10. A method of preventing or treating COPD and other acute or chronic diseases in a mammal, in particular a human, which comprises administering to said mammal a therapeutically effective amount of at least one of glutamate, other than mono  
15 sodium glutamate, and a precursor of glutamate selected from the group consisting of leucine, valine, isoleucine, and a keto acid thereof.

11, Use of at least one of glutamate, other than mono sodium glutamate, and a precursor of glutamate selected from the group consisting of leucine, valine, isoleucine, and  
20 a keto acid thereof, in the preparation of food supplement or a prophylactic composition to restore or increase the glutamate level in the body, in particular the muscles, of an individual.